

### **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

#### **LISTING OF CLAIMS:**

Claim 1. (Currently Amended): A breeding method of lipid producing fungi that belong to genus *Mortierella*,

said method comprising an expression suppressing step of suppressing expression of a specific gene in the lipid producing fungi, wherein said expression suppressing step includes an RNAi step of suppressing expression of the specific gene by an RNAi method or a co-suppression step of suppressing expression of the specific gene by a co-suppression method.

Claim 2. (Canceled).

Claim 3. (Currently Amended): A method as set forth in claim [[2]] 1, wherein said RNAi step includes a transformation step of introducing a recombinant expression vector into the lipid producing fungi, wherein the recombinant expression vector causes expression of double stranded RNA corresponding to all of or part of a nucleotide sequence of the specific gene.

Claim 4. (Original): A method as set forth in claim 3, wherein said RNAi step further includes an expression vector constructing step of constructing the recombinant expression vector.

Claim 5. (Previously Presented): A method as set forth in claim 3, wherein the transformation step is carried out by an electroporation method or a particle delivery method.

Claim 6. (Previously Presented): A method as set forth in claim 1, wherein the lipid producing fungi are *Mortierella alpina*.

Claim 7. (Previously Presented): A method as set forth in claim 1, wherein the specific gene is a lipid metabolism gene.

Claim 8. (Original): A method as set forth in claim 7, wherein the lipid metabolism gene is a fatty acid metabolism gene.

Claim 9. (Original): A method as set forth in claim 8, wherein the fatty acid metabolism gene is a gene that encodes a fatty acid chain elongase or a fatty acid desaturase.

Claim 10. (Original): A method as set forth in claim 9, wherein the gene that encodes the fatty acid chain elongase is GLELO gene or MAELO gene.

Claim 11. (Original): A method as set forth in claim 9, wherein the gene that encodes the fatty acid desaturase is a gene that encodes an enzyme selected from the group consisting of:  $\Delta 5$  fatty acid desaturase,  $\Delta 6$  fatty acid desaturase,  $\Delta 8$  fatty acid desaturase,  $\Delta 9$  fatty acid desaturase,  $\Delta 12$  fatty acid desaturase,  $\Delta 15$  fatty acid desaturase,  $\Delta 17$  fatty acid desaturase, and  $\omega 3$  fatty acid desaturase.

Claims 12-15. (Canceled).